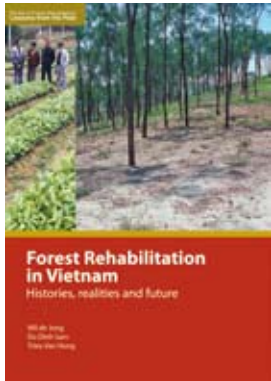


Forest rehabilitation— learning from the past



Logging, conversion to agricultural crops, cattle ranching and urbanisation have all taken their toll on the world's tropical forests. In many places, the loss of natural forest has been permanent, and frequently planned: farmland, fast-growing plantations, settlements and other developments have taken their place. However, hundreds of millions of hectares of once richly forested land serve none of these purposes.

In Indonesia alone, there are 96 million hectares of degraded land – an area three times the size of Italy – and Indonesia continues to lose 2 million hectares of forests a year. While some is converted

provide valuable guidance to those undertaking rehabilitation projects in the future.

The research focused on Indonesia, the Philippines, China, Vietnam, Brazil and Peru. At a workshop held in Bogor in 2004, experts on rehabilitation from universities, governments, the private sector and NGOs helped CIFOR to share lessons learnt and organise the research results. Further workshops, bringing together the same teams from all six countries, were held during the following two years. The research – described in a series of six books, *Review of Forest Rehabilitation: Lessons from the Past* – provides the most detailed analysis to date of the



Tree nursery in Dai Lai, North Vietnam (Christian Cossalter); Local people were closely involved in establishing this teak plantation on stony farmland near Yogyakarta, Indonesia (Tini Gumartini).

“The projects which worked best were tailored to meet the needs of local communities.”
Ani Adiwinata Nawir

to other uses, much is left as an unproductive wasteland of degraded scrub and grassland. Rehabilitating lands such as these, in Indonesia and other tropical countries, could do much to improve local livelihoods, safeguard environmental services and benefit wildlife.

“Although there had been a long history of forest rehabilitation,” explains CIFOR economist Ani Adiwinata Nawir, “there had been very little analysis of the factors which have contributed to the success or failure of rehabilitation projects.” To fill this gap in our knowledge, CIFOR launched a major research project to analyse a broad range of rehabilitation projects: some from the distant past, some recent; some covering many hundreds of thousands of hectares, some just a few; some run by government, others run by NGOs and farmers’ organisations. It was hoped that lessons learned from an appraisal of these projects and similar initiatives would

ingredients for success (and, of course, failure).

“Everywhere we have looked, we have found that governments have continued to repeat the same mistakes,” says Nawir” and this explains why so many projects have failed to achieve their goals.” All too often, projects have been

poorly planned – in Indonesia, for example, only 14 per cent of the projects had base maps of the area where they were operating – and many made profound technical errors when it came to choosing the right tree species, planting regimes and so forth. According to Wil de Jong, a CIFOR scientist who now works for the Center for Integrated Area Studies



in Japan, the Vietnamese case study highlighted the importance of good planning. "The better the technical planning for a project, the greater the chances of success," he says.

The failure to involve local communities was a feature of many projects which had run into trouble. "The projects which worked best in Indonesia were tailored to meet the needs of local communities," explains Nawir. All too often, local communities have just been used as hired labour during the planting phase, and have been given little or no stake in the management of rehabilitated sites.

A similar story can be told for the South American case studies. "The lessons learned from the survey of Peruvian restoration schemes," explains Cesar

the project team presented its draft report to a meeting in Hanoi attended by representatives from government, NGOs, the forestry industry and the conservation lobby. "This was a very important part of the process," recalls de Jong. "The report was subjected to some very serious criticisms, and as a result we went through a major process of revision. Some of the criticisms were hard to address, but I think this process definitely helped us to improve the report."

But will the six books have any significant influence in the future? Takeshi Toma, who managed the project at CIFOR and has since returned to work for the Forestry and Forest Products Research Institute in Japan, believes they will. "I am already

The reports provide the most thorough exploration to date of the key factors which influence the success of rehabilitation schemes.



Mixed results: a successfully rehabilitated forest in Guangzhou, China (Takeshi Toma); and a *Casuarina* plantation in Vietnam damaged by local people (Christian Cossalter)

Sabogal, "is that project managers need to ensure active local participation from the planning phase onwards." The Peruvian experience suggests that when projects are being designed they should take into account market demands for forest products. Ideally, rehabilitation schemes should help to enhance local livelihoods.

The Review of Forest Rehabilitation was one of the most ambitious projects coordinated by CIFOR, and it involved large numbers of researchers from many different institutions, as well as government officials and forest managers. In each country, a small group of experts provided regular advice and was consulted about project design and the packaging and dissemination of the findings. Their input, and that of many national partners, helped to shape the final reports.

This participatory approach was exemplified by the experiences in Vietnam. In February 2006,

using the publications to advise Japanese officials, as well as people in the private sector and civil society, about the best way to plan forest rehabilitation schemes in the tropics," he says. Indeed, it would be strange if governments and others involved in forest rehabilitation were to ignore these studies. They provide the most thorough exploration to date of the key factors which influence the success of rehabilitation schemes.

There has also been very positive feedback from many of the countries involved. For example, key lessons derived from the study have been taken into account by ongoing and new initiatives in the Brazilian Amazon, where up to 30 per cent of the estimated 70 million hectares of deforested land are abandoned or underutilized. The Brazil study encouraged the Ministry for Environment to strengthen the National Programme for Native Species Silviculture and Agroforestry Systems.

